

545oneDrive2_00014525

EPAct bi-weekly update mtg. 2-10-2009

1) Light-duty exhaust program (Sobotowski, Hart)

- Phase 1 – completed (DOE data also received to compare)
- E0/E10/E15 data analysis
 - regulated pollutants
 - toxics/PM – use for RFS2 undecided due to fuel formulation concerns

*

-Fuel speciation

- 17,18,19 TA for SWRI analysis
- all fuels will have additional analysis in later round robin

*

-Phase 2 - 50F tests – to be complete this week *- haven't analyzed the reg pollutant data yet*

-Phase 3 – Work plan done – program to begin in late February

*

-Fuels and blending status for phase 3 fuels

Sequence of fuels makes a difference (going 15-10-0) – FTP made a diff.

-Additional vehicle testing to be performed:

-FTP (Chet) Phase 1B on 6 vehicles completed

*-NLEV/T1- 2 CRC vehicles in repair – test in phase 3

- tie data back to complex model and DOE testing
- FTP or LA92 – may decide based on FTP Tier2 results

-Other options or testing

- 95F LA92 – DOE to pursue
- Evaporative – likely covered by E77-3 but different T2s
- PM studies?
- Sulfur supplement to NVFEL program?

-OBD data good in P1 fuel 19 – did change a couple of parameters for 50F

Phase I: up

Phase FTP: down

II: up

III: random

Phase IV: WA

- change to repeats

~~only FTP~~

*** no model data?*

- still lag 1 speciated

2) Oil study (Christianson, Sobotowski, Fernandez) – Report will be issued at later date

3) PM speciation with NVFEL/ORD (Christianson, Hoyer)

- test cell improvements required – Joe M. trip
- sampler equipment required – in-house project

-NVFEL to do round robin – some PM work – E85

4) Nonroad exhaust program (Caffrey) Intertek/Carnot

- Fuel 18 testing status
- Testing and aging (1/2 FUL) status
 - Completed engines
 - Remaining funds for FUL on handhelds only
- *-Additional testing in conjunction with ARB program (budgeted for 09)
 - SOW complete for exhaust on indolene and E10
 - speciated data on ARB program

*5) Evap testing (Hart) – Visit to SWRI

- E77-2
- E77-2b -work statement accepted – need additional 100k
- E77-3- (RSD in non-IM area @ San Antonio) partially approved by OMB
- E77-2c to include E20 – not EPA program

Newer:

- FTP results: reprocessed for unit change from LA92, need George analysis, Cay copy
- Need to get resolution to drift issue – DOE satisfied and will pay for additions
- NMOG reporting on E10/E15/E20 –FID response request to LOD
- FE calculation update – in recalculated phase 1 – available?
- CRC spring presentations limited to only a few
- SWRI costs estimates improving
- Sulfur program fuel not available until January plus cell updates occurring
- Concerns over FTIR and Mass spec. data – Cay – SWRI answer

→ see back for Mins. Briefing

→ from long-term comprehensive report data analysis plan

→ Thursday briefing
or mid-level brief for
administration

1-pager for the briefing

→ what would we want to say re topics?
for EIS...

* what could we say re topics - Can't
say they tend to go down.

\$ 3,951,610

EPA's EPAAct Program Cost Estimate (Apr. 29, 2008)

Category	Cost	Totals
12/20 SWRI Proposal		
Spreadsheet errors in calculating the cost of exhaust gas speciation		
Reduction of night shift staffing from 3 to 2		
VOC speciation always done with alcohol and carbonyl measurements		
Projected additional cost of test fuels		
Correction of fuel price (Phase 1)		
Add FTIR to Phase 2		
Add FTIR to Phase 3		
Cartridges for aldehydes		
Acrolein & setup		
Blank LA92 tests		
Additional budgetary reporting		
Visit Hallermand (Phase 1)		
Fuel 18 iteration 3 (Phase 1)		
Fuel 18 iteration 4 (Phase 1)		
External correlation data		
Coastdowns		
Battery chargers		
LA92 instead of LA4		
RVP checks (Phase 1)		
Alcohol measurement by Innova in Phases 2 and 3 (\$2002.8408(1007/1166))	\$ (175,180)	\$ 4,096,183

Ex. 4 - CBI

Program cost recommended for approval on 1/30/2008

Program cost recommended for approval on 4/29/2008

Projected final program cost

EPAAct Program Cost Estimate

Work Assignment	Cost Estimated	Actual	# of Tests	Cost/Test \$	Test Replication Rate
Whole EPAAct Program	\$ 4,271,363		878		Ex. 4 - CBI
WA 0-01 (Phase 1)					
WA 1-02 & 03 (Phases 2 & 3)					
WA 1-02 (Phase 2)					
WA 1-09 (FTP)					

Ex. 4 - CBI

shall we meet the cost target?

75°
L 0317 K now, 1/3 way through

12-16-08

EPAct:

3pm o/c

Kevin - finished F17 of Phase II

will ~~not~~ supposed to be finished Jan 23

Fuels: 2 @ SURF, 7 will be there in a week or so...

the 3 E20 fuels came in pretty good...

* We have Fuel 17+18 in MS Access FTP, date

EPA bi-weekly update mtg. 12-02-2008

- 1) Light-duty exhaust program (Sobotowski, Hart)
 - Phase 1 – completed (DOE data also received to compare)
 - E0/E10/E15 data analysis
 - regulated pollutants
 - toxics/PM – use for RFS2 undecided due to fuel formulation concerns
 - cold start focus – George analysis compares well with DOE
 - Fuel speciation *G.P. and ethanol*
 - 17,18,19 TA for SWRI analysis
 - all fuels will have additional analysis in later round robin
 - Phase 2 - 50F tests – started 11/17 – Rafal and Connie visit *should be done by end of Jan*
 - Phase 3 – Work plan being prepared – to begin in February
 - Fuels and blending status for phase 3 fuels
 - Significant updates - Rafal
 - Requested (1) additional E10 with low sulfur to access Acet. Impact – Rafal design
 - Additional vehicle testing to be performed:
 - FTPs (Chet) Phase 1B on 6 vehicles completed
 - NLEV/T1- 2 CRC vehicles in repair – test in phase 3
 - tie data back to complex model and DOE testing
 - FTP or LA92 – may decide based on FTP Tier2 results
 - Sensitive vehicles – dropped- DOE will do in catalyst aging
 - Other options or testing
 - 95F LA92 – DOE to pursue
 - Evaporative – likely covered by E77-3 but different T2s
 - PM studies?
 - Sulfur supplement to NVFEL program?
 - OBD data good in fuel 19 – did change a couple of parameters for 50F
- 2) Oil study (Christianson, Sobotowski, Fernandez) – Report will be issued at later date
- 3) PM speciation with NVFEL/ORD (Christianson, Hoyer)
 - test cell improvements required – Joe M. trip
 - sampler equipment required – in-house project
 - NVFEL to do round robin – some PM work – E85
- 4) Nonroad exhaust program (Caffrey) Intertek/Carnot
 - Fuel 18 testing status
 - Testing and aging (1/2 FUL) status
 - Completed engines
 - Remaining funds for FUL on handhelds
 - Additional testing in conjunction with ARB program (budgeted for 09)
 - SOW complete for exhaust on indolene and E10 *approved today (?)*
 - speciated data on ARB program
 - Look into testing at EPA new dynos in future for any gaps
- *5) Evap testing (Hart) – Visit to SWRI
 - E77-2 *Finished*
 - E77-2b -work statement accepted – need additional 100k *evap more* → *Specimen for 26*
 - E77-3- (RSD in non-IM area @ San Antonio) partially approved by OMB
 - E77-2c to include E20 – not EPA program

Newer:

- FTP results: reprocessed for unit change from LA92, need George analysis, Cay copy
- Need to get resolution to drift issue – DOE satisfied and will pay for additions
- NMOG reporting on E10/E15/E20 –FID response request to LOD
- FE calculation update – in recalculated phase 1 – available?
- CRC spring presentations limited to only a few
- SWRI costs call today
- Sulfur program fuel not available until January plus cell updates occurring

*Fuel 19 - re-testing
this fuel - some
things make it seem
like two fuels. Based
on this, will correct
Phase I, FTP, Phase II*

*-ask Tony for
George's "report" on
the data analysis
comparison w/ DOE*

*E77 summary
note 17m*

- Marion asked for modal data of one E0 + E10 fuel
for a more representative fuel vehicle we are already
getting all 3 bags for...
- ask Ed ~ modal data - 0.9 seconds

Fuel 5: Rafal - blended after fuel 17. does not look good.
- 69% octane 48, 40% aromatics

Rafal recommends to reblend this fuel. Add to list

look for drift ~ Toyota w/FIP

EPA bi-weekly update mtg. 11-18-2008

- 1) Light-duty exhaust program (Sobotowski, Hart) *Connie, Rafael, dworkin @ SWRI*
 - Phase 1 – completed (DOE data also received to compare)
 - E0/E10/E15 data analysis
 - regulated pollutants
 - toxics/PM
 - cold start focus
 - Fuel speciation
 - 17,18,19 TA for SWRI analysis
 - all fuels will have additional analysis in later round robin
 - * -Phase 2 - 50F tests – started 11/17
 - * -Phase 3 – Work plan being prepared – to begin in February
 - * -Fuels and blending status for phase 3 fuels
 - All E0 fuels designed and many handblends made-authorized x E0, (4) E10
 - Requested (1) additional E10 with low sulfur to access Acet. Impact – Rafael design
 - Additional vehicle testing to be performed:
 - FTPs (Chet) Phase 1B on 6 vehicles completed – results?
 - *-NLEV/T1- 2 CRC vehicles in repair – test in phase 3
 - tie data back to complex model and DOE testing
 - FTP or LA92 – may decide based on FTP Tier2 results
 - *-Sensitive vehicles – dropped- DOE will do in catalyst aging
 - Other options or testing
 - 95F LA92 – DOE to pursue
 - Evaporative – likely covered by E77-3 but different T2s
 - PM studies?
 - Sulfur supplement to NVFEL program?
 - OBD data good in fuel 19 – did change a couple of parameters for 50F
- 2) Oil study (Christianson, Sobotowski, Fernandez) – Report will be issued at later date
- 3) PM speciation with NVFEL/ORD (Christianson, Hoyer)
- test cell improvements required – Joe M. trip
 - sampler equipment required – in-house project
 - NVFEL to do round robin – some PM work – E85
- 4) Nonroad exhaust program (Caffrey) Intertek/Carnot
- Fuel 18 testing status *will not spend \$ on speciation from road stuff b/c Fuels are messed up...*
 - Testing and aging (1/2 FUL) status
 - Completed engines
 - Some remaining funds but limited contract options available –new fuel?
 - *-Additional testing in conjunction with ARB program (budgeted for 09)
 - SOW complete for exhaust on indolene and E10
 - speciated data on ARB program
 - Look into testing at EPA new dynos in future for any gaps *an evap summit w/ CRC*
- *5) Evap testing (Hart) budget *Connie wants to have 1/2 CRC summit in Dec*
- E77-2
 - E77-2b -work statement accepted – need additional 100k
 - E77-3- (RSD in non-IM area @ San Antonio) partially approved by OMB

Newer:

- Repeat requirements will remain same as phase 1
- PM repeat requirement for repeats removed
- NMOG reporting on E10/E15/E20 –FID response request to LOD
- FE calculation update – status?
- CRC spring presentations
- Travel to SWRI – Connie 11/17 and Rafael 11/17
- Call to SWRI management today 11/4 helped clarify EPA expectations
- Sulfur program fuel not available until January plus cell updates occurring

1) Light-duty exhaust program (Sobotowski, Hart)

- Phase 1 – completed (DOE data also received to compare)
- E0/E10/E15 data analysis
 - regulated pollutants
 - toxics/PM
 - cold start focus
- Fuel speciation
 - 17,18,19 TA for SWRI analysis
 - all fuels will have additional analysis in later round robin

* -Phase 2 - 50F tests – 11/17 tentative start date

-Phase 3 – Work plan being prepared

- * -Fuels and blending status for phase 3 fuels *all E0 fuels authorized for bulk blending E10 approved by end of month*
 - Good progress in hand blends and several batches ordered
 - Dallas to handle drum logistics and fuel samples @ EPA

-Additional vehicle testing to be performed:

- FTPs (Chet) Phase 1B on 6 vehicles started 10/21 - status → *on last fuel, 2/24 test replicates etc of criteria not being met RM, CO₂, NO_x, HC*
- * -NLEV/T1- 2 CRC vehicles in repair – test in phase 3
- tie data back to complex model and DOE testing
- FTP or LA92 – may decide based on FTP Tier2 results

* -Sensitive vehicles – dropped- DOE will do in catalyst aging

-Other options or testing

- 95F LA92 – DOE to pursue
- Evaporative – likely covered by E77-3 but different T2s
- PM studies?
- Sulfur supplement to NVFEL program?

-OBD data good in fuel 19 – did change a couple of parameters for 50F

2) Oil study (Christianson, Sobotowski, Fernandez) – Report will be issued at later date

3) PM speciation with NVFEL/ORD (Christianson, Hoyer)

- test cell improvements required – Joe M. trip
- sampler equipment required – in-house project

-NVFEL to do round robin – some PM work – E85

4) Nonroad exhaust program (Caffrey) Intertek/Carnot

- Fuel 18 testing status *still testing*
- Testing and aging (1/2 FUL) status

-Completed engines

-Some remaining funds but limited contract options available – new fuel?

* -Additional testing in conjunction with ARB program (budgeted for 09)

- SOW complete for exhaust on indolene and E10
- speciated data on ARB program

-Look into testing at EPA new dynos in future for any gaps

*5) Evap testing (Hart) budget

-E77-2

-E77-2b -work statement accepted *CRC + NREL adding E20*

-E77-3- (RSD in non-IM area @ San Antonio) partially approved by OMB

-workplan overbudget - still waiting for ICR approval

Newer:

-09 Budget mtg. @ 11:30 - results

-David Hawkins cell temperature analysis – please review and we will repeat for 50F

-Relaxing repeat requirements – vehicle specific based on phase 1 variability? – *see above no PM same Phase 1*

-PM repeat requirement- need to understand PM behavior on gasoline vehicles at very low PM levels

-NMOG reporting on E10/E15/E20 – plan to get FID response – *breach of contract - SWRI hasn't given us NMOG*

-INNOVA measurement methods development need? Phase 2 to re-attempt measurement

-Help needed to control and track fuel samples and barrels at NVFEL/SWRI/other for all programs/RR

-FE calculation update – status?

-CRC spring presentations

-Travel to SWRI – Connie 11/17 and Rafal 11/17 or when 50F starts – Julia needs to know

-Call to SWRI management today @ 4:00 to address deliverable requirements

-E10 in sulfur program?

SWRI is charging us for down time between phases + Connie is fighting it.

EPAct bi-weekly update mtg. 10-21-2008

1) Light-duty exhaust program (Sobotowski, Hart)

- Phase 1 – completed
- E0/E10/E15 data analysis
 - regulated pollutants
 - toxics/PM
 - cold start focus
- Fuel speciation
 - 17,18,19 TA for SWRI analysis
 - all fuels will have additional analysis in later round robin
- Phase 2 - 50F tests *50° start test* *started yesterday - end of Jan*
 - proceeding with requirement to start at 50F after 75F FTP testing is completed *projected 3 weeks*
- Phase 3 – Work plan being prepared
- Fuel blending status for phase 3 fuels
 - Spreadsheet approach working now (not actual Aspen software)
 - (7) E0 fuels designed- 2 done 5 handblends need minor changes
 - (2) E10 fuels designed –handblends being checked - adjusted
- Additional vehicle testing to be performed:
 - FTPs (Chet) Phase 1B on 6 vehicles *started 10/21 - projected 3 weeks*
 - NLEV/T1 (2 CRC vehicles in process of being shipped)
 - tie data back to complex model and DOE testing
 - FTP or LA92 – may decide based on FTP Tier2 results
 - Sensitive vehicles (Chet/Ed) PZEV/HMC. – still investigating
- Other options or testing
 - 95F LA92 – DOE to pursue
 - Evaporative – likely covered by E77-3 but different T2s
 - PM studies?
 - Sulfur supplement to NVFEL program?
- OBD data good in fuel 19 – did change a couple of parameters for 50F

2) Oil study (Christianson, Sobotowski, Fernandez) –Report will be issued at later date

3) PM speciation with NVFEL/ORD (Christianson, Hoyer)

- test cell improvements required – Joe M. trip *for samples in house - 1st qtr next year?*
- sampler equipment required – in-house project
- NVFEL to do round robin – some PM work – E85

4) Nonroad exhaust program (Caffrey)

- Fuel 18 received and being tested
- Testing and aging (1/2 FUL) status
 - Completed engines
- Additional testing in conjunction with ARB program
 - SOW complete for exhaust on indolene and E10
 - speciated data on ARB program
- \$ issue – Look into testing at EPA??

5) Evap testing (Hart)

- E77-2
- E77-2b -work statement accepted
- E77-3- (RSD in non-IM area @ San Antonio) partially approved by OMB

New:

- 09 Budget - last week E77-2b and E77-3 needed additional funds
- David Hawkins cell temperature analysis – please review and we will repeat for 50F
- Relaxing repeat requirements –vehicle specific based on phase 1 variability?
- PM repeat requirement- need to understand PM behavior on gasoline vehicles at very low PM levels
- NMOG reporting on E10/E15/E20
- INNOVA measurement methods development need?
- Help needed to control and track fuel samples and barrels at NVFEL/SWRI/other for all programs/RR
- FE calculation update

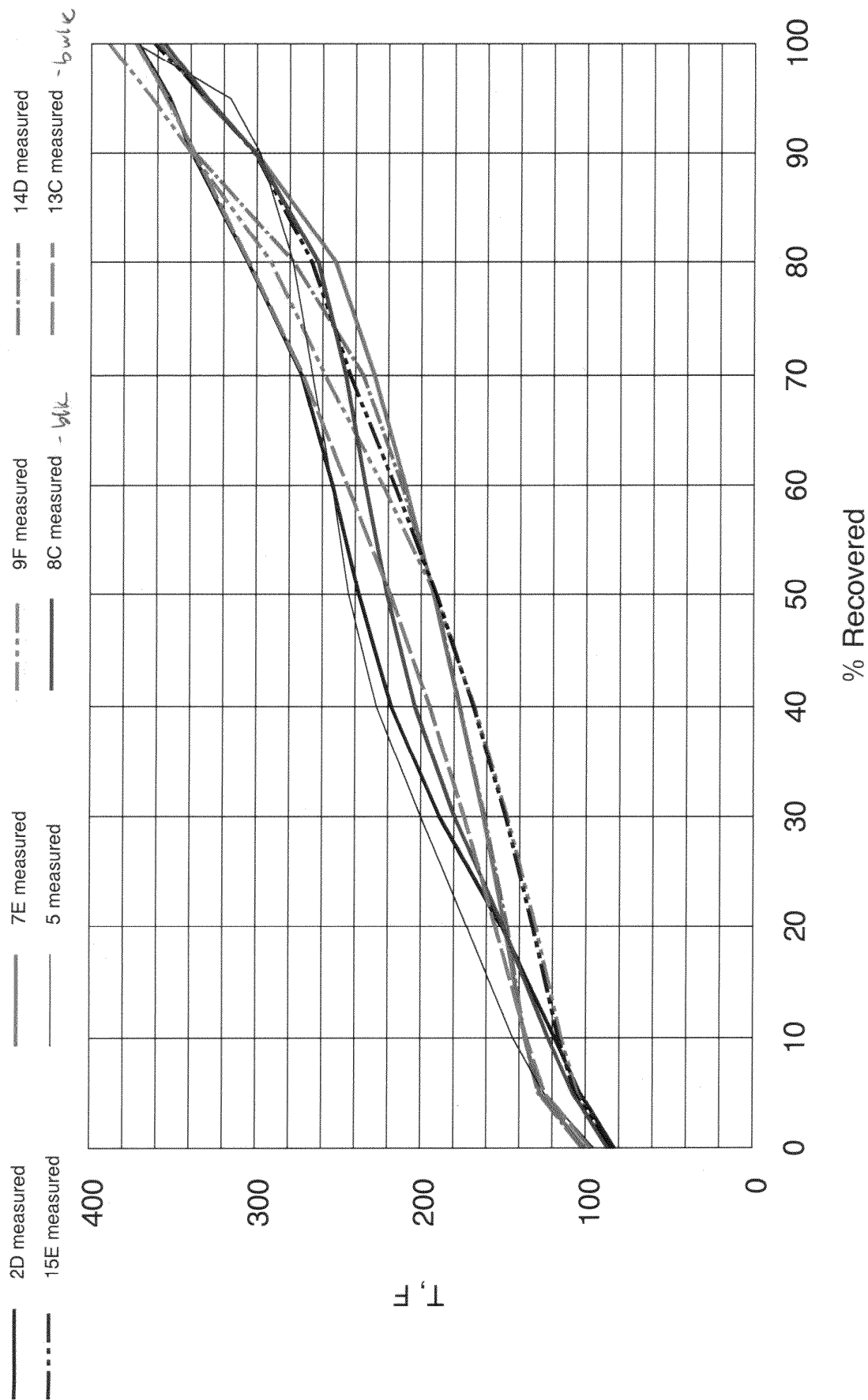
*we asked for it, but we aren't getting it
no formula for E15, E10, etc. FID picks up some but not all.
so there needs to be a response factor.*

Might be able to do repeatability by vehicle: some are tighter than others

*Repeatability: 5% CO2
large PM Non (low?)
PM-2.25
fleg?
randomness of PM*

Ed: CRC requesting abstracts about EPHET
Air toxics workshop - begining of Dec.

EPAct Distillation Data



I:\project\EPAct Testing\2007 Light Duty Exhaust Program Docs\Program Design\Test Fuel Blending\E0 Fuels Hand Blend Distillation Data.TC



Maria Martinez
<maria.martinez@swri.org>
EPA-REG,06,MPPD
Sent by: Maria Martinez
<maria.martinez@swri.org>

Received Date:
10/20/2008 12:02 PM
Transmission Date:
10/20/2008 12:02:32 PM

To Rafal Sobotowski/AA/USEPA/US@EPA, "Lawson, Doug"
<Doug_Lawson@nrel.gov>
cc Kevin A Whitney <kevin.whitney@swri.org>
bcc

Subject LD Biofuels Study in SwRI Annual Report

Southwest Research Institute would like to publish the following text in its 2008 Annual Report. Could you review the text below and let us know if it's okay for publication? Feel free to revise:

SwRI recently expanded its capabilities and infrastructure to support a light-duty biofuels study funded by EPA and the National Renewable Energy Laboratory investigating the effects of ethanol on modern vehicles. The expansion makes SwRI the first independent emissions research organization with facilities for both gasoline particulate sampling, according to the latest EPA requirements, and for large-scale safe storage of fuels at room temperature.

Thanks for your assistance,
-Maria

Maria Martinez
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"Gene Jimenez "
<ejimenez@swri.org>
Sent by: "Gene Jimenez"
<ejimenez@swri.org>

Received Date:
10/16/2008 04:09 PM
Transmission Date:
10/16/2008 04:09:24 PM

To Rafal Sobotowski/AA/USEPA/US@EPA

cc "Kevin A. Whitney" <kevin.whitney@swri.org>, "Peter J
Morgan" <peter.morgan@swri.org>

bcc

Subject EPA RVP Fuel 17 & 19 results 10-16-08

Rafal,

The table below shows the RVP results from Fuels 17 and 19. Unfortunately, samples were not pulled from the bottom drums of Fuel 19. Paper work with instructions are in place to pull samples from the top and bottom of 2 drums for Fuel 19 this weekend as we begin testing for WA 1-09. We can also pull samples as we get into Phase 2 testing.

Drum No.	Fuel 17 RVP (psi)	
	Top	Bottom
7	9.25	na
9	9.18	8.54
10	8.64	5.91
11	8.88	8.7
12	5.77	na

	Fuel 19	
	Top	Bottom
1	8.79	na
2	8.54	na
3	8.54	na
4	8.75	na
5	7.99	na
6	9.04	na

Gene Jimenez
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Eugene Jimenez .vcf